

REMARKS

Claims 1-13 are all the claims pending in the application.

Claim Rejections

Claims 1-13 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Buskens et al. (U.S. Patent No. 6,215,782; hereinafter “Buskens”) in view of newly cited Moulsey et al. (U.S. Patent No. 6,668,168; hereinafter “Moulsey”). Applicant respectfully traverses the rejection.

Claim 1 is directed to a method of managing radio links between a mobile station and a radio access network. Claim 1 requires, in part:

in the event of an interruption being detected in the radio link between said mobile station and said radio access network, suspending said radio link and attempting to reactivate said radio link for a predetermined time interval.

Buskens discloses a method for reconnecting calls in a wireless telecommunication system. Buskens discloses the establishment of a traffic channel 131 between mobile station 135 and base station 122. *See* Buskens, col. 4, lines 14-18. Upon detecting an involuntary call release, the base station 122 determines whether reconnection procedures should be attempted and, if so, the base station 122 attempts to open new air traffic channels. *See* Buskens col. 4, lines 3-48. If the reconnection is successful, the base station 122 uses new air interface (i.e., traffic channels) resources in the call with the mobile station 135. *See* col. 4, lines 57-60.

The Examiner concedes that Buskens does not teach or suggest “suspending said radio link and attempting to reactivate said radio link for a predetermined time interval”, as recited by claim 1. Instead, the Examiner cites Moulsey for teaching this unique feature of the claim.

Moulsey relates to operating a radio communication system. Specifically, Moulsey deals with the problem of overhead caused when a UMTS control channel is maintained in both directions between a Base Station (BS) and a Mobile Station (MS), but packet data transmitted along the channels has a very low duty cycle. *See* Moulsey, col. 1, lines 18-26. As a solution, Moulsey teaches that the uplink and downlink control channels enter a dormant state between transmission of data packets. *See* Moulsey, col. 3, lines 15-17. When the MS has another data packet to send, it transmits a re-activation request along a dormant channel or a fast signaling channel, the BS acknowledges the re-activation request, and the MS transmits the data packet upon receipt of the acknowledgement. *See* Moulsey, col. 3, lines 37-43.

Applicant respectfully submits that Buskens and Moulsey, alone or in combination, do not teach or suggest all of the features of claim 1. Buskens teaches setting-up a new channel upon an involuntary call release. Moulsey teaches suspending and re-activating a channel to reduce overhead between transmissions of data packets. Accordingly, neither Buskens nor Moulsey teaches “in the event of an interruption being detected ... suspending said radio link and attempting to reactivate said radio link”, as recited in claim 1. In other words, considering what the claims as a whole require and what each reference teaches or suggests to those of

ordinary skill in the art, rather than picking or choosing particular elements from the prior art, Moulsey and Buskins do not teach all of the features and limitations of claim 1.

Furthermore, Applicant respectfully submits that the Examiner's motivation to combine Buskins and Moulsey, i.e., to "reduce the excessive overhead that control channels represent on a data channel using a small proportion of the available channel capacity", does not appear proper. Moulsey teaches that maintaining a control channel when packet data has a low duty cycle (long duration between transmissions) is inefficient and results in high overhead. *See* Moulsey, col. 1, lines 18-26. Buskins teaches setting-up a new radio channel upon the involuntary disconnect of an old radio channel. *See* Buskins, col. 4, lines 21-29. Therefore, suspending and re-activating would not reduce the overhead cost of maintaining a channel due to unused channel capacity, because in Buskins the channel is dropped entirely.

Applicant respectfully submits that independent claim 1 would not have been obvious under 35 U.S.C. § 103(a) because Buskins and Moulsey, alone or in combination, do not teach or suggest all of the features of the claims. Furthermore, Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to combine Buskins and Moulsey to produce the claimed invention. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of claim 1, and dependent claims 2-4.

Independent claims 6 and 11-13 recite features substantially the same as those discussed above with regard to claim 1, except in apparatus form, and are patentable over Buskins by similar reasoning. Accordingly, Applicant respectfully requests that the Examiner withdraw the

rejection of claims 6 and 11-13, and claims 7-9 which are patentable *at least* by virtue of their dependency.

Claims 5 and 10

Claims 5 and 10 are rejected under 35 U.S.C. §103(a) as obvious over Buskens and Moulsey in view of Official Notice. Applicant respectfully traverses the rejection.

The Examiner concedes that Buskens does not teach or suggest drawing up a timetable on the basis of statistical results obtained in a communications network and relating to the durations of interruptions detected by detectors means, as recited in claims 5 and 10. However, the Examiner takes Official Notice that “a method/apparatus wherein control means (CM) are arranged to draw up said timetable on the basis of statistical results obtained in said communications network and relating to the durations of said interruptions detected by said detector means (DM), is well known in the art.” *See* Office Action, pg. 4. The Examiner further asserts that one of ordinary skill in the art would have been motivated to “combine the above teaching with Buskens, in order to provide service quality report for the purpose of improving the performance of the system.” *Id.*

In the Response filed February 6, 2007, Applicant traversed the Examiner’s use of Official Notice and requested that the Examiner come forward with pertinent prior art. Applicant respectfully submits again that Buskens does not disclose the use of, or a need for, quality service reports. Such reports would have no use because Buskens does not suspend radio connections. Further, “improving the performance of the system” is a very general statement, and does not

satisfy the Examiner's burden of supporting the use of Official Notice with cogent technical reasoning. The Examiner provides no purported reason why the modification would have improved performance.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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